

Claims

1. Article which is provided with an individual marking means (14) for identification, characterised in that the marking means (14) is a random identifier (15) peculiar to the article.
2. Article according to claim 1, characterised in that the article is a package (10).
3. Article according to claim 1 or 2, characterised in that the random identifier (15) forms part of the design of the package (10).
4. Article according to any one of claims 1 to 3, characterised in that the random identifier (15) is composed of at least one random pattern.
5. Article according to claim 4, characterised in that the random pattern is composed of a distribution of luminophores (16).
6. Article according to claim 4 or 5, characterised in that in addition to the random pattern a marking (23) generated from the random pattern is arranged on the package (10).
7. Article according to claim 5 or 6, characterised in that the distribution is detectable and can be filed or deposited as an optionally coded or uncoded marking (23) in a data bank (43) and/or as print on the package (10).
8. Article according to claim 7, characterised in that, in addition to the random pattern and/or marking (23), a coding means (17), in particular a serial number (18), is applied.

9. Article according to claim 8, characterised in that the coding means (17) is in a predetermined and reproducible relationship to the marking means (14).
10. Article according to claim 8 or 9, characterised in that the coding means (17) and the marking means (14) are in correlation with each other.
11. Article according to claim 10, characterised in that the correlation is formed by storage.
12. Article according to claim 10 or 11, characterised in that the correlation is formed by a coding function.
13. Article according to any one of claims 1 to 12, characterised in that the random identifier (15) is an integral part of the package (10) itself.
14. Article according to any one of claims 1 to 13, characterised in that the random identifier (15) is optionally arranged on the whole package (10) or in a predefined region of the package (10).
15. Article according to any one of claims 1 to 14, characterised in that the package (10) is composed of a primary packaging (32) and/or a secondary packaging (38) and/or a tertiary packaging.
16. Article according to claim 15, characterised in that the coding means (17) and/or the marking means (14) and/or the marking (23) are arranged on the primary packaging (32) and/or the secondary packaging (28) and/or the tertiary packaging in such a way that they can be clearly identified from the outside.
17. Article according to claim 16, characterised in that the marking (23) at least on the secondary packaging (38) is designed as a link number (39), wherein the link

number (39) can be generated from the coding means (17), and/or the marking means (14) and/or the marking (23) of the primary packaging (32).

18. Article according to any one of claims 3 to 17, characterised in that the random pattern is a gap width and/or an overlap region and/or a contact region (29) of joint surfaces and/or a joint seam (25) and/or a wave pattern (28) of a joint seam and/or folds (30) and/or cut edges or the like of the packaging.
19. Method for the individual marking of articles, in particular packages (10), with an individual marking means (14), characterised by the steps of:
 - detection of a random identifier (15) peculiar to the article, in particular to the package (10), as a marking means (14),
 - conversion of the random identifier (15) to an individual marking (23), and
 - filing of the marking (23) as a data record in a data bank (43) and/or deposition as print on the article, in particular on the package (10).
20. Method according to claim 19, characterised in that a packaging is labelled, wherein the package (10) is provided with a random identifier (15) peculiar to the package (10), preferably a random pattern consisting of luminophores (16), as a marking means (14).
21. Method according to claim 19 or 20, characterised in that conversion is effected by means of a suitable mathematical function.
22. Method according to any one of claims 19 to 21, characterised in that the marking (23) is coded before printing on the package (10) or before filing in the data bank (43).

23. Method according to any one of claims 19 to 22, characterised in that the marking (23) is compressed before filing in the data bank (43).
24. Method according to any one of claims 19 to 23, characterised in that the random identifier (15) is detected optically.
25. Method according to any one of claims 19 to 24, characterised in that the random distribution of luminophores (16) is made visible with UV light, coded numerically and stored as the random identifier (15).
26. Method according to any one of claims 19 to 25, characterised in that the package (10) is additionally provided with an individual coding means (17), in particular a serial number (18).
27. Method according to claim 26, characterised in that at least the marking means (14) and the coding means (17) are combined into a data pair and put in a predetermined, reproducible reference relationship to each other.
28. Method according to claim 27, characterised in that the data pairs are in each case correlated with each other and filed in a data bank (43).
29. Method according to any one of claims 26 to 28, characterised in that provision of the package (10) with the coding means (17) and/or the marking means (14) and/or the marking (23) takes place optionally on-line or off-line.
30. Method according to any one of claims 26 to 29, characterised in that the marking means (14), the coding means (17) and the marking (23) are optionally applied to a primary packaging (32) and/or a secondary packaging (38) and/or a tertiary packaging or attached to one of them.

31. Method for the identification of articles, in particular packages (10), which are provided with an individual marking means (14), by detection and evaluation of the marking means (14), characterised by the steps of:
 - detection of a random identifier (15) peculiar to the article, in particular to the package (10), as a marking means (14),
 - conversion of the random identifier (15) to an individual marking (23), and
 - alignment of the marking (23) with print of the marking (23) on the article, in particular on the package (10), and/or a data record filed in a data bank (43) and containing the marking (23).
32. Method according to claim 31, characterised in that the random identifier (15) is rendered visible by irradiation with light in the ultraviolet spectral range and detected optically.
33. Method according to claim 31 or 32, characterised in that conversion is effected by means of a suitable mathematical function.
34. Method according to any of claims 31 to 33, characterised in that the random identifier (15) is scanned, wherein the associated marking (23) is determined from the scanned information and compared with print applied to the package (10) and/or a data record filed in a data bank (43).
35. Method according to any one of claims 31 to 34, characterised in that in addition a coding means (17) arranged on the package (10), in particular a serial number (18), is detected.

36. Method according to claim 35, characterised in that a data pair which is composed of coding means (17) and marking means (14) and which is formed from the information detected is compared with a data pair filed in the data bank (43).
37. Device for the individual marking of articles, in particular packages (10), with an individual marking means (14), characterised in that a means (41) is provided for detecting at least one random identifier (15) peculiar to the article, in particular to the package (10), as a marking means (14), a means (42) for generating and displaying or outputting a marking (23) from the random identifier (15), and a means for filing or depositing the marking (23).
38. Device according to claim 37, characterised in that in addition a means for applying the random identifier (15) is provided.
39. Device according to claim 37 or 38, characterised in that the means for deposition or filing includes a printer (45) or the like and/or a storage means, in particular a data bank (43).
40. Device according to any one of claims 37 to 39, characterised in that in addition a means for applying a coding means (17) is provided, wherein the means for applying the coding means (17) can be identical with the printer (45) for depositing the marking (23).
41. Device according to any one of claims 37 to 40, characterised in that in addition means (44) are provided for coding the marking (23).
42. Device according to any one of claims 37 to 41, characterised in that all means (41, 42, 43, 44, 45) of the device (40) are operatively connected to each other, for which purpose the means (41 to 45) are preferably linked together.

43. Device for the identification of articles, in particular packages (10), provided with an individual marking means (14), characterised in that a means (41) is provided for detecting at least one random identifier (15) peculiar to the article, in particular to the package (10), as a marking means (14), and a means (42) for generating and displaying or outputting a marking (23) from the random identifier (15).
44. Device according to claim 43, characterised in that the means (41) is designed to emit UV light and pick up the information which is rendered visible.
45. Device according to claim 43 or 44, characterised in that in addition the means (41) is designed to detect further information located on the package (10), in particular the marking (23) and a coding means (17).
46. Device according to any one of claims 43 to 45, characterised in that the means (42) is designed to carry out mathematical functions, in such a way that the random identifier (15) can be converted to the marking (23).
47. Device according to any one of claims 43 to 46, characterised in that in addition a means (44) is provided for decoding the marking (23).
48. Device according to claim 45 or 46, characterised in that the means (41, 42, 44) are connected to a storage means, in particular a data bank (43).
49. Device according to claim 47, characterised in that all means (41 to 44) are operatively connected to each other, wherein the means (41 to 44) are preferably linked together.
50. Device according to any of claims 43 to 49, characterised in that the device (40) is designed as a mobile hand-held device.